

CHARTS:

1. Strategic retaliatory forces: 1961, 1964, 1970.
2. Alert forces: 1961, 1964, 1970.
3. System Dependability: B-52, Minuteman. (from vehicles in the force to vehicles on target).
4. Alert Force Megatonnage: 1961, 1964, 1970
- 4A. Delivered Megatonnage: 1961, 1964, 1970.
- (5. Goldwater Bomber Megatonnage vs. Actual.)
- (6. Goldwater Alert Megatonnage vs. Actual.)
8. Which numbers? From "Capacity" down to Delivered MT: 1961, 1970.
6. Assured Destruction: Soviet Fatalities After Soviet First Strike. 1961, 1964, 1970; 1970 missile force only.
9. Fatalities After US First Strike: different MM forces.
10. Fatalities After US Second Strike: different fallout, different SU tactics, different MM forces.

CHART 1 Strategic Retaliatory Forces: 1961, 1964, 1970

1. Numbers like these must be the starting point of a discussion of the trend in ~~the~~ strategic retaliatory forces. But they don't go very far toward answering the important question about a force programmed for 1970, which is, ~~will it do~~,
will ~~it do~~
2. How well~~s~~ it do its job? How well~~s~~, compared to other forces we might buy, and to forces in other years?
3. It would be convenient~~xxx~~ if we could answer ~~force capability~~ that question of ~~capabilities~~ the same way we answer ~~How big is it?~~
~~that is in it~~ by counting: counting vehicles, counting warheads, counting megatons. But size, however we measure it, and differences in size--between forces that are all very large, like these--tells us ~~little~~ ~~the~~ ~~about~~ ~~capabilities~~ very little about significant differences between forces ~~and~~ or the adequacy of any one of them in serving US national security.

4. We must first ask: What are the ~~tasks~~ of these forces? Basically, they are two:

First, and most important: To deter deliberate nuclear attack on ~~the US or its Allies, by~~ ~~disaster~~ ~~by~~ ~~an~~ ~~surprise~~ ~~attack~~ ~~on~~ the US or its Allies, ~~by~~ ~~disaster~~ ~~by~~ ~~an~~ ~~surprise~~ ~~attack~~ ~~on~~ by an unquestionable capability ~~under~~ to inflict disastrous destruction on the Soviet Union. We must have this capability under all foreseeable circumstances, including a well-planned and well-executed surprise attack on the US.

In addition, in the event that a general nuclear war is forced upon us, the forces should have the power to limit the destruction of US and Allied cities and population to the maximum extent practicable.

~~So that if we are faced on many, many, many forces, we have enough more~~
~~of the numbers that matter have to be calculated - used to discuss in public.~~
~~I want to walk through some of the calculations today that lead to numbers that matter~~
~~in terms of our many goals.~~
~~drastically than the size of overall forces. (part)~~

CHART 2. Strategic Alert Forces: 1961, 1964, 1970.

1. These numbers are one step closer to indicating "differences that make a difference." Either to deter or to limit damage, it is the vehicles that can survive enemy attack and respond in a timely fashion that count.
2. This is particularly true for the bombers and the sub-launched missiles. (Both of these alert components can expand in a crisis, but we don't want the adequacy of our forces to depend on such strategic warning).
3. As might have been noted in the previous chart, the force program for 1970 (and for 1972, which is as far as our forward planning currently goes) includes a sizable bomber component. We are spending ~~_____~~ this year and next on a continuing program ~~in~~ of structural improvements to the B-52's, to extend their life into the late 70's, if that proves desirable.
- ~~4.~~ These numbers still don't reveal adequately the relative ability of these forces to put vehicles over their targets in war. For that, ~~we~~ we must begin looking at some calculations. (Next chart).

reasons are that the survivability of the bombers before launch, and their ability to penetrate enemy defenses are both lower and more difficult to estimate than for the Minuteman. Under attack by ~~radiation~~ sub-launched missiles, or even by ICBMs if BMWS malfunctioned and failed to provide the 15 minutes of warning we expect, a substantial number of even the alert bombers might be caught on the ground and destroyed. A single H-bomb on a SAC base will destroy all the bombers on that base.

4. Calculations like these, applied to the actual alert force, carry us through to an estimate of force "size" that is much more relevant to the capabilities and goals of the forces than is the pre-attack unit equipment: the size of the force ~~striking~~ expected to arrive over enemy targets. But their effect, when the vehicles get there, will still depend on:

- the number of warheads carried, and their yield (next chart)
- the accuracy of delivery (particularly against hardened targets)
- the timeliness of delivery (against enemy strategic offensive forces)

5. ~~The message~~

Chart 3. System Dependability

1. ~~Extraneous~~ Weapon reliability, in the sense of the incidence of malfunction, is only one factor among several in determining what may be called the dependability with which a weapon in the forces will be ready, will survive attack, will penetrate to the target area with a weapon which will detonate. ~~Beyond~~
2. Even beyond dependability, the actual effect of the retaliatory weapons will depend on the timeliness of arrival, its accuracy and yield.
2. But this chart, highly compressed, gives the flavor of some of the considerations and calculations that underly estimates of capability.
2 A great deal of analysis and experience and judgment lies behind each of the "rates" shown here. In some cases there is considerable operational or exercise or test experience that is relevant; in others, it is necessary to rely on analysis and simulation, with an even higher component of ~~xxxxx~~ judgment. But in no case would a single, precise estimate be ~~xxx~~ reliable as a guide to performance as the ranges presented here, reflecting the important uncertainties.
3. This comparison between B-52's and Minuteman brings out the contrast between reliability and dependability. Thanks to years of operational experience with the B-52, not only is the reliability high but we know it to be high; the range of uncertainty is narrow. As yet ~~xxxxxx~~ ~~xxxxxx~~ the reliability test program for the Minuteman—on which we are spending _____ —is not completed, so ~~xxxx~~ we have used these calculations a wide range of rates, all lower than for the B-52. Yet ~~xxxxxx~~ indicates higher system dependability for the Minuteman; a larger number out of a given force could be expected to reach their targets. The main

CHART 4. Alert Force Megatonnage: 1961, 1964, 1970

CHART 5. Delivered Megatonnage: 1961, 1964, 1970

1. Counting megatons has much the same shortcomings as counting vehicles, as an indicator of force capability; it ignores the problems of survival, reliability, penetration, accuracy, timing, and effectiveness. But because so much attention has been focussed on megatonnage recently, we indicate the trend, for the alert forces, in Chart 4.

2. These figures are based on the actual ~~maximum~~ loadings for these years. These loadings are not designed, of course, to maximize megatonnage per vehicle, but to increase overall effectiveness against the target system. For example

Ex 2. We arrive at a more significant measurement by taking into account the dependability factors of Chart 3, to estimate the number of megatons actually delivered at the targets. (Chart 5). Here the difference between 1961 and the later years is much more striking than in measurements that ignore survival and penetration. Largely because of the increasing proportion of the alert force composed of survivable missiles--even though these ~~missiles~~ individually carry smaller yields than the bomber loads--a much higher fraction of the alert megatonnage actually gets to target today and in 1970 than in 1961.

3 >

4.3. Moreover, the increasing fraction of missile megatonnage also means that an increased amount of megatonnage gets to target quickly, in 30 minutes instead of hours after a commitment decision; that means a great ~~difference~~ increase in effectiveness against strategic offensive targets, in the damage-limiting mission. ~~Yield~~ limited by bunker, — as with bombers, mostly for economic — tend to arrive long after many

3. In fact, even these figures for delivered megatonnages understate the real change that has taken place in the vulnerability of ~~the~~ our forces. The ~~estimated~~ megatonnage that would have gotten to target in 1961 ~~is~~ was as high as it is estimated here only because the Soviet ability to launch vehicles against our force was extremely limited: far lower than intelligence predictions earlier or estimates at the time, far lower than it could have been if the Soviets had deployed more first-generation missiles, far lower than it is today.

Bomber

Chart 5 Goldwater Assumptions vs. Actual ~~Actual~~ Megatonnage

Chart 6 Goldwater Assumptions vs. Actual Alert Megatonnage

1. The figures in Chart 4 on actual alert megatonnage carried and delivered are in striking contrast to those in Senator Goldwater's recently publicized calculations. The main discrepancies are between his figures for "deliverable nuclear capacity" of bombers and the megatonnages actually carried by bombers. (Chart 5)

2. Senator Goldwater arrives at his estimates of "deliverable nuclear capacity" in precisely the same way ~~that~~ Professor Seymour Melman has used for the past several years. They assume that each bomber carries the largest bomb in the stockpile --Melman uses a 20 MT bomb, Goldwater a 24 MT bomb--as if the inventory did, or should, contain enough of these bombs for the whole force, and as if the forces actually did, or should, load up this way. The result is an enormous figure for bomber megatonnage~~xxxx~~ in 1961 and today; and ~~xx~~ correspondingly precipitate drop in alert megatonnage, when, by Goldwater's second erroneous assumption, bombers disappear from the alert force.~~in 1970~~.

3. ~~The~~ In interesting contrast, the same hugely inflated megatonnages are used by Goldwater to argue that the alleged imminent decline is perilous and constitutes unilateral disarmament, and by Melman--somewhat more cogently, given the figures in question--to argue the existence of vast "overkill" capacity. But the figures are wrong, and misleading, when Melman uses them and they are wrong and misleading when Goldwater uses them.

4. These fictitious loadings, labelled "capacities," are chiefly misleading because they are easily confused by readers with actual loads carried. (Goldwater strongly encouraged this confusion by in his press release citing/Administration statements clearly referring to loads actually carried and claiming that his "capacity" figures refuted them). The

effect is to indicate a decline of 10,000 MT between 1961 and 1970, instead of the actual near-tripling of alert MT (with delivered MT going up an estimated six times).

5. Actual loadings are not designed, of course, to maximize yield per vehicle but to increase effectiveness against the target system. ~~But~~ ~~xxxxxxxxxxxxxxxxxxxx~~ Why don't alert bombers carry the loads assumed by Melman and Goldwater? The first answer is that the 20 MT bomb ~~xxxxxx~~ assumed by Melman has been phased entirely out of the inventory, on the recommendation of the JCS in 1960, approved by Secretary Gates and President Eisenhower; and the 24 MT weapon assumed by Goldwater ~~xxxxxx~~ ^{But} has never existed in more than very limited quantities. /The reasons are instructive. ~~But~~ ~~xxxxxxxxxxxxxxxxxxxx~~ A bomber load of several smaller, new bombs was believed to be actually more effective ~~xxxxxxxx~~ in destroying enemy targets. And these particular weapons required high-altitude delivery, which meant greatly decreased ability to penetrate the improving Russian air defenses. In other words, to load every bomber with one of these bombs would ~~xxxxx~~ show enormous alert force megatonnages--as in the Melman-Goldwater calculations--but could easily result in lower megatonnage actually delivered to target.

CHART 7

Assured Destruction: Soviet Fatalities After Soviet First Strike

1. This is the key calculation in evaluating the adequacy of the strategic retaliatory forces to deter deliberate attack. ^{It is a calculation}
~~US forces could~~ from the point of view of a Soviet decision-maker, of the fatalities that ~~causing~~
~~US forces could~~ ~~losses~~ ~~against cities,~~ ~~losses~~ ~~against cities,~~ 2. It is a morbid calculation, not suitable for dwelling on in public discussion. And it is a calculation, an estimate, not an "objective measurement"; it reflects judgment, ~~and~~ analyses that are oversimplified yet still complex, guesses and uncertain predictions, rather than a large body of directly relevant experience. Yet, compared to the "hard facts" of force size that occupy public discussion, it has the advantage of being relevant to the main questions of ~~complex~~ capability and trend, ~~and~~ ~~danger~~.

It is clear that

3. The destruction capability that a Soviet planner would have to contemplate: ~~xxx~~

- a) has increased drastically since 1961, despite radical increases in Soviet offensive striking forces;
- b) is extremely large, almost certainly much larger than necessary to convince even a ~~wishful~~ reckless and ruthless Soviet planner that a ~~xxx~~ deliberate attack on the US would be disastrous;
- c) ~~xxx~~ will be ~~xxx~~ at least as high in 1970 as in ~~1972~~ ~~xxx~~ 1964, despite a further considerable increase in Soviet striking power.

dx

which is not the way we would actually use our forces in wartime.

4. It could be argued that even the assured destruction capability of 1961--45 million, equivalent to the population of the _____ largest cities in Russia--was adequate to the goal of deterring deliberate attack. But that capability was "assured" only in the face of ~~what we now know to have been a rudimentary Soviet strategic offensive force; it was far from assured in relation to the intelligence estimates of mid-1961, or in relation to the force the Soviets might secretly have acquired by 1961 and did acquire by 1963.~~ In contrast, the estimates for today and 1970 would ~~remain very far above this level even if "best guesses" for the Soviet forces of those dates should be replaced by very much larger estimates, and if we made very pessimistic assumptions on operational factors.~~

5. ~~By 1970, manned bombers are no longer needed for adequate deterrence.~~ ~~Without putting a precise figure on the level of assured destruction that would make deliberate attack look highly unprofitable, it seems safe to assume that figure is less than the 85 million fatalities threatened by our 1970 missile component alone.~~ Bombers could still have a useful function--which is why they are programmed--but that function would be damage-limiting, not deterrence. To claim, as Senator Goldwater has been doing, that deterrence in 1970 hangs upon the presence or absence of manned bombers, that the capability for destruction posed by our missile force alone would be "weak" and "tempting attack", is either totally to ~~misrepresent~~ fantasies ~~about~~ about the requirements of deterrence.

for Chart 8. Which Numbers? From "Capacity" to Delivered MT

gained

1. Looking back on the discussion so far, we should have/some perspective ~~xxx~~ on the problem of choosing measurements of the ability of the strategic forces to deter attack. Even if calculations they weren't topical, the Melman-Goldwater ~~xxx~~ would be tempting examples of misleading "measurements."
2. Their figures for "capacity" ~~xxx~~—which ~~xxx~~ all ~~xxx~~ ignore/questions of actual stockpile, range, penetration capability and effectiveness, i.e., all the operational factors that determine actual loading—are classic examples of virtually irrelevant "measurements." The first figure, ~~xxx~~ applying the fictitious "capacity" to the entire force, is, if possible, one degree less relevant than the figure for the alert force.
3. ~~xxx~~ These estimates have two consequences that are typical of/poorly-chosen measures:
 - a) They grossly overstate the capability of a given force, expressed in more relevant terms: e.g., delivered megatonnage, or better, assured ~~xxx~~ destructive capability.
 - b) They grossly distort the relative capabilities of two different forces: as between ~~xxx~~, the 1961 force composed mostly of bombers and the 1970 force relying heavily on protected missiles.

(If an extended discussion of the Melman-Goldwater calculations is desired, see Charts 5-7 and comments. Otherwise:

4. All these figures are based on the actual vehicle loadings for these years. These loadings are not designed, of course, to maximize yield per vehicle, but to increase effectiveness against the target system. For example, the 20-24 megaton bombs on which Professor Seymour Melman and Senator Goldwater base their calculations of "deliverable capacity" required high-altitude delivery, which would have greatly decreased ability to penetrate as Russian air defenses improved. In other words, to load every bomber with one of these bombs ~~as in the Melman-Goldwater calculations~~ would result in enormous alert force megatonnages—as in the Melman-Goldwater calculations, but could easily result in lower megatonnage actually delivered to target. Because of this, and because ~~xxxxxx~~ a bomber load of several smaller, new bombs was actually more effective, the JCS in 1960 recommended, and Secretary Gates and President Eisenhower approved, ~~xxxxxx~~ that ~~xxxxxx~~ nearly all of these obsolete, high-yield bombs be phased out of the inventory.

9.
CHART 10. Fatalities After US First Strike

Chart 10. " " " Head Title

1. As the figures in Chart 9 indicated, the strategic forces today are almost surely much larger than would be required to assure enough destruction for adequate deterrence. If deterrence were the only desired goal, or the only feasible goal, of the strategic forces, critics the ~~exponents~~ of "overkill" would have a strong case, and the advocates of larger forces or even, for example, of maintaining ~~the~~ ^a bomber force would have almost none.

ness

2. The effectiveness of given forces in reducing damage to the US and its Allies is even more complex, difficult and uncertain to estimate than their effectiveness in assuring ~~assurance~~ destruction. It depends sensitively on the circumstances under which the war breaks out, the ~~degree~~ warning and state of alert on both sides, the ~~tactics~~ tactics used by both sides, and the state of civil defense and air defense in the US and its Allies. Nevertheless, in a large number of analyses of a wide range of contingencies and operational assumptions have all indicated that forces substantially larger than those needed for deterrence or the destruction of enemy cities would ~~will~~ significantly reduce damage to the US and Western Europe. That is the main reason our forces today and our force programmed for 1970 are as large as they are.

Damage-limiting capability getting worse over time: because of Soviet forces.

Compare to alternative forces in 1970 that might be bought.

Offensive forces depend on, and compete with, other measures in damage-limiting role.

Bombers have advantage of greater accuracy and higher yield; big disadvantage of slowness.

Currently programmed bombers make little contribution because of slowness--getting there after big missile strike; additional, "advanced" bombers would have same problem, and furthermore would be competing with current bombers.

Damage-limiting role of bombers doesn't ~~fix~~ have the urgency of the preservation of deterrence.

Question clouded by misconceptions about bombers: recall, flexibility.

Bombers not needed for deterrence, city-busting; too slow except for marginal, mop-up role in damage-limiting.

This nation, to survive, must have flexibility in both weapons and strategy. If we continue to place over-reliance on missiles rather than a mixed arsenal, our only reactions to unacceptable Soviet probes would have to be submission--or all-out nuclear war. There are many types of warfare that can take place between the extremes of hot and cold. We must be ready for all of them.

(Goldwater issues review, June 1964)

The defense policies of this Administration add up, in effect, to unilateral disarmament.

((GW hints here that planes are for non-all-out nuclear war. Then TFX is relevant. What can B-52's do in such war that MM, on the one hand, and TFX on the other, can't do?

And, force of B-52's will be available in 1973. Even if it were only

Cong, Feb 27:

I think if we put off the design of a manned bomber one more year, we are going to get into the danger of an inadequate defense,

((Can we use argument that all JCS except CSAF recommend deferring decision on development and procurement of an AMSA, now in program definition phase?))

because if we take the word of the Secretary (MCN) that 75 percent of our nuclear power is carried in the bomb bays of the SAC bombers (NOW) by 1972 or 1973 we will only have 25 to 35 percent of our nuclear weight left.

(If McN said that during test ban hearings: a) What was MM/Pol force then?
b) What now?
c) What in 1973?
d) Was McN right then? How does calculation arrive at this?

By mid-1970--say 1972 or 1973, the B-52's will be gone also, as well as the B-58's...then by 1972 or thereabouts if we do not add more to our missile fleet, we shall have cut our retaliatory force, our total nuclear force--to the point where it would be about 25 to about 35 percent of what it is at present.

Not for civil defense! unless there was an evidenced public interest in it, and there is not.

Der Speigel, US News: military strength of US and SU

But if you ask that question again in 1970, I would have to agree that our failure to provide new strategic weapons--particularly in manned aircraft and in improved missiles,--will put us behind the Russians. At that point, I think we can expect trouble.

A. This is what the force is today.

This is what it was in 1961.

This is the programmed force for 1972.

B. Its adequacy, and supremacy, today is unquestioned: by our opponents, our allies, or by domestic critics. But it is fair to ask: a) Will it, so far as we can see, be adequate to its tasks in 1972?

b) What is the trend? Are the conceptions underlying the changes sound? Are we moving toward weakness or strength?

C. Critics of the programmed force choose simply to ignore the bomber component in 1970 and later. Actually:

a) Estimates of usable life (Lemay).

b) Bomber improvement program.

... taking the criticism on its own terms, However, the comparisons made between the current force and the missile component of the 1972 programmed force are in themselves ~~exaggerating~~ entirely misleading. It is important to see why.

D. Here are the goals, as we see them, of the strategic force.

a) Deterrence: assured ~~exp~~ destructive capability.

b) Limiting damage to US and Allies.

These impose tasks on the force; different forces are validly compared in terms of their ability to do these tasks.

a) Capability to destroy, after an enemy attack, enemy population, industry, governmental controls (this calculation by the enemy is central to deterrence of deliberate attack).

b) Capability to destroy, in time, elements of enemy offensive forces (this is one component of an ability to limit damage).

E. Here is the capability of the 1972 missile force alone to destroy enemy urban targets, after enemy attack.

That is deterrence of deliberate attack; it is strength; the presence or absence of bombers, new or old, or of additional missiles, simply has no meaningful effect on that evaluation.

Simply to emphasize that point, here is the comparable capability with a larger Minuteman force:

and here it is with the present force, including the bombers.

When the numbers of protected vehicles are this high, the size of the warhead, over one megaton, does not affect the results very much. In Russia, there are only (5) urban targets that would not be utterly destroyed by a single Minuteman or Polaris warhead; for those 5, two to four would suffice.

In short, even ignoring the programmed 1972 bomber force, it honestly is impossible/to describe that programmed ~~as~~ force as weak, or less powerful than today's, from the point of view of tempting deliberate attack. To state it flatly: for the deterrent mission alone, ~~bombers~~ ~~and~~ neither bombers nor additional missiles would be needed in 1972.

F. ~~End~~ In considering the role of bombers, either B-52's or more advanced types, in contributing to other objectives, it would be useful to clarify some common misconceptions about ~~the~~ inherent advantages of manned vehicles.

- a) The recallability issue; control. (Show concept of H-Hour Control Line)
- b) Flexibility.

G. To illustrate some advantages of missile forces, compare 1964 and 1961 in terms of the nature and flexibility of the war plans that were possible with the two types of forces. The actual limitations and

inflexibility of the 1961 plan reflected limitations of manned bombers that are difficult to eliminate: a) vulnerability on the ground
b) slowness in flight
c) vulnerability in flight
d) complexity of coordination; rigidity.

The larger megatonnage which these planes could carry, compared to MM/Polaris warheads, did not compensate for these shortcomings, in terms of the types of war plans that could be implemented or the degree of success. Likewise, the force in 1972, even ~~without~~ the bombers, is a more effective force than today's~~s~~ from the point of view of every ~~hoodwink~~ ~~one of our objectives.~~ ~~(This concept has already been discussed in section D.)~~

H. ~~Expendability; survivability; exit strategies~~

SU Military Thought

((Like US: question of choosing a response to a problem considered basically intractable...with given technology and resources. Erratic divergences of opinion, foreclosing of certain normal goals, hope for technological breakthrough, lack of realism, ignoring of certain areas.

Thus, any strictly retaliatory response regarded as hopelessly unpromising; one response to this is to stress need for prevention (if war cannot be avoided), forestalling; like USAF pressures for "timely action" (Brodie), "pre-emption." Take into account pressures for wishful thinking in this area; lag in perception of real problems with it; imitation of USAF doctrine, with lag; possibilities for educating them; AND DEGREE OF REALISM, in considering possibility of "blunting" US attack, given certainty that US will attack.

Consider aspects of US posture and declaratory policy that would encourage or discourage their belief in success. E.g., CONTROLLED SECOND STRIKE POLICY, or even SU belief that US was set for controlled first strike policy, might encourage SU to believe in advantages of being first rather than second.

Chances of false alarm depend in part on SU theories of US behavior, influencing their interpretation of "strategic warning." E.g., their belief that any war must blow up into all-out war; their emphasis on capability of US overseas forces and importance of eliminating them; their belief (?) in US trigger-happiness; their calculation, supported by McNamara's, of advantages to US of striking first, especially with controlled response; McNamara's first strike threats, now reinforced by Kennedy's threat w.r.t. Cuba. They may put more emphasis on ability and need to strike from strategic warning, rather than on tactical warning; hence, normal alert posture may not reflect the real likelihood of an SU blunting mission.

We should examine more closely what the USAF arguments for "blunting" were in the Fifties; what would have impressed them that it was a bad choice? What would make SU "sure" that we were going to attack...soon?

Also, question of how SU would propose to "blunt." Consider USAF interpretation of this!

Controlled war school apparently not (yet) represented in SU! Standard USAF vs. USAF/Army/Navy vs. "Deterrence only." No "limited war" or conventional weapons strong support either.

LIKE US, SU HAD HISTORICAL REASON TO BE OBSESSED WITH A "PEARL HARBOR" ATTACK! Moreover, they seem to have an emphasis on the defense and the likelihood of being attacked greater than the American; the similarity is on their expectation of need to defend against surprise attack. (Until recently, this may have emphasized possibility of strategic surprise; need to avoid, need to react to; now, they may even worry about tactical surprise after failure to avoid strategic surprise. USAF progression). Their preparations seem poor to RAND eyes; but: look at USAF from SU and consider how US might have prepared to defend, without RAND influence. Jan. 60 Khrushchev speech: compare to New Look and to New New Look (1956-57, US).

K. and SU may genuinely underestimate the advantages afforded them by their conventional superiority (because of belief that war must explode), except as one threat among many to brandish; thus, they may misinterpret US desire to deal with it; and they may trade it away for "modern" weapons. They might even trade it in arms control agreement!

How much weight do SU planners give to sincerity of US fears and preparations to defend against SU surprise attack? Since they don't talk about SU first strike, hard to tell.

Views of the progressives, in stressing role of "logical analysis" and prediction, make them sound like RAND.

((Note: a vice of economists: to elaborate theories without seeking tests or direct empirical information. Note AJW's use of the word "empirical".)

((Note general problem: new impossibility of learning or correcting mistakes during a general war. But importance of learning during crises and limited wars). (Not done in past. "Rehearsals" generally ignored: Civil War, Russo-Japanese war, crises; Spanish war, Poland, crises... Now,...)

Relation of budgetary (Party) considerations in influencing strategy, allocation; see US analogy.

(Why weren't 1955 statements on pre-emption followed up? Will they be, now?)

Compare official SU expectations of M start of war to US (USAF). Compare their actual preparations; and relation of official US expectations to US preparations. Mass surprise attack by US. Expected role of US overseas bases? Polaris?

They seem to believe in inevitable escalation; (any distinction between conventional and nuclears, in likelihood of escalation? Any credence to conventional war in Europe with US? Cr, Ike attitude?); accidental war (what would they really expect us to do if we had an accident? If they had an accident or unauthorized action against US ally? If they used rockets against U2 base? If Cuba fired weapons?); inability to escape without grave damage; ability to damage US severely in retaliation; ease of European "country-busting" (how about vulnerability of SU satellites? How are they supposed to take all this? How would SU receive threat against them?) (no boasts of SU second-strike capability since 1960); importance of hitting political-administrative centers, communications junctions, ~~xxxx~~ command posts; also industrial and vital centers (do they have SAC attitude toward this?); importance of "exploding the aggressor's plan" by timely action; possibility that there will be little or no warning, and that pre-emption is requirement despite this difficulty; importance of US overseas bases; usefulness of blunting effectively, even if can't totally forestall victory unlikely, war unpromising ("the peace will be worse"); belief in counterforce, strategic and tactical; but growing belief in rear area bombardment (influence of SAC doctrine?) (Might they go for belief in "enemy capitulation"? They are relatively silent on: capability or need to destroy US ZI forces (because air defense can handle? Simply beyond capabilities, currently? Haven't yet thought closely about problem, because of tradition and evident lack of capability?); wars in which real victory is possible, and they win it; confidence even of survival; influencing enemy plans or conduct; avoiding targets, collateral damage, limiting use of weapons;

Emphasis on defense: ASW (planes?); AICEM; wishful evaluation?

Need to preempt technologically; may not be committed to lead in quantity as much as quality.

Failure to prepare for Hitler's surprise attack, conduct strategic withdrawal, counterattack.

((As in US: inertia, service interests, traditionalism, differing doctrinal innovations and views, result in "inconsistent" programs (Waskow) that may involve more actual flexibility and insurance than a program that gambled heavily on a given, modern doctrine.))

A major mission of these forces is to deter war by their capability to destroy the enemy's war-making capabilities, including not only his military installations but also his production and government-control centers, and under certain conditions, his urban society.

Major mission of the SRF: to deter war by their capability to destroy the enemy's war-making potential, including not only his nuclear strike forces and military installations, but also his urban society, if necessary.

To serve as a maximum deterrent to nuclear war, our SRF must be visibly capable of fully destroying the Soviet society under all conditions of retaliation. In addition, in the event that such a war is forced upon us, they should have the power to limit the destruction of our own cities and population to the maximum extent practicable.

Quite likely that SU would not fire all of its strategic weapons in a salvo; launching of their bombers and missiles would extend over a sufficient period of time for us to receive the first blow, to strike back not only at Sov cities, if that be our choice, but also at the elements of their forces that had not yet been launched. To achieve this capability, we must have a force considerably larger than that which might be needed simply to destroy Soviet cities.

Certainly, the US would be greatly damaged by the initial wave of a nuclear attack. And certainly, as time goes on and the SU continues to ~~harden~~ harden its missile sites and continues to build missile-firing subs, it will become increasingly difficult to destroy a substantial portion of the residual forces.

Lebanon and Quemoy

1. Overflight and staging rights in countries along deployment route in limited war may be abrogated on short notice; last minute negotiation may not be successful. (Austria, Switzerland, Greece; first two refused to permit air passage, Greece restricted).
2. US deterrent policy didn't stop CHICOMS from aggression in Quemoy; however, willingness to apply force did deter them from expanding beyond bombardment, though they could have done so.
3. Demonstration of US willingness to honor commitments strengthened our alliances
4. Quemoy confirmed that Communists would strike in situations where political and territorial issues were ambiguous; they try to place US in position where risks involved don't appear to justify the counteraction required. They tried to make strategic value of the off-shore islands the issue, rather than the principle of resistance to any territorial expansion by force. Thus they try to undermine support for US action; and try to demonstrate that it is the US that is unjustifiably resorting to force.
5. Showed ability of Communists to force great funding problems and military dislocations on US without great effort.
6. Resulting greater confidence by Chiang led to greater cooperation.
7. In future crisis, nations in general area can be expected to increase degree and urgency of their demands for military support. (Phillipines).
8. Controversial whether operation in Quemoy showed that fleet mobile bases were inadequate by themselves; whether bases in area were required.
9. Allied military forces can contribute materially to limited war operations. (Chinese Air Force).
10. Small allied countries may be reluctant to commit major elements if replacements are not in sight. (GRC ships)
11. Ability to supply islands under artillery fire surprised both US and CHICOMS.
12. Taiwan and Lebanon threats developed simultaneously.

PACAF Report on Taiwan-Quemoy Operation.

JCS indicated that nuclear weapons would probably not be employed, at least initially. This led to a new cycle of planning actions, to establish HE capability. Augmentation units required, to be capable of implementing Taiwan contingency plan and still maintain EWP posture: problem here because of HE restriction. 141

restriction was ax" One of the more startling complications of the Taiwan crisis" since practically all planning for a number of years has been predicated on nuclear "compensator." Appears that NSC, as well as the general public, brackets all nuclear weapons together as horrible weapons of mass destruction. (Must recognize that very great spread in yields of available nuclear weapons has made these weapons conventional). The US must be free to use suitable nuclear weapons at the onset of any conflict which involves overt Communist aggression.

Communications: West of Hawaii communications are 100% high frequency radio. As a result, due to even normal atmospheric disturbances, there were periods of six to eight hours when communications between such vital links as Clark, Taiwan, or Okinawa were completely. Instances were recorded also where comm system was so ~~xx~~ over-burdened that essential instructions were delayed excessively. Possibility also of HF blackout. Contingency situation revealed: 1) how inadequate our present communications are; 2) How impotent we are, both operationally and supportwise when we don't have reliable communications.

((CHECK: How were operations and control actually affected?))

PACAF Intelligence estimate of July 23, 1958 predicted CHICOM moves in Taiwan Straits as diversions (to Middle East crisis), least likely to lead to all-out war.

Sept 9: If Chicoms fails to interdict by artillery fire (started 23 Aug) they may utilize air-attack, especially against unloading. May be impossible to confine Chinat air, then; GRC may move against Mainland; with purpose to goad the Chicoms into retaliatory actions which will involve direct clashes with the US forces in the Taiwan Straits.

Nov 12: appears that Chicoms motives were: diversion; fulfill planned countermeasure against GRC use of islands; goad GRC into attacking mainland, US involvement, then bring issue before UN, win UN recognition for Mao; counter domestic problems, associated with communization; Mao may be making a bid for top position in Bloc policy making and leadership

((Shows possibilities for war initiated by small ally--GRC, South Korea?-- or by Chicoms.))

Need for US both to show firmness, and to resist providing "provocation."))